

NAME

dracut.conf – configuration file(s) for dracut

SYNOPSIS

/etc/dracut.conf /etc/dracut.conf.d/.conf /usr/lib/dracut/dracut.conf.d/*.conf*
/run/initramfs/dracut.conf.d/.conf*

DESCRIPTION

dracut.conf is loaded during the initialization phase of dracut.

**.conf* files are read from */run/initramfs/dracut.conf.d*,
/usr/lib/dracut/dracut.conf.d and */etc/dracut.conf.d*. Files with the same name in
/etc/dracut.conf.d will replace files in */usr/lib/dracut/dracut.conf.d*.

The files are then read in alphanumerical order and will override parameters set in */etc/dracut.conf*. Each line specifies an attribute and a value. A '#' indicates the beginning of a comment; the following characters, up to the end of the line, are not interpreted.

dracut command line options will override any values set here.

Configuration files must have the extension *.conf*; other extensions are ignored.

CONFIGURATION OPTIONS

add_dracutmodules+=" *<dracut modules>* "

Add a space-separated list of dracut modules to call when building the initramfs. Modules are located in */usr/lib/dracut/modules.d*.

force_add_dracutmodules+=" *<dracut modules>* "

Force to add a space-separated list of dracut modules to the default set of modules, when host-only mode is specified. This parameter can be specified multiple times.

omit_dracutmodules+=" *<dracut modules>* "

Omit a space-separated list of dracut modules to call when building the initramfs. Modules are located in */usr/lib/dracut/modules.d*.

Warning

Avoid manually omitting dracut modules, as you may inadvertently remove essential ones that dracut can't detect or warn you about. Using this option is not recommended and is at your own risk.

dracutmodules+=" *<dracut modules>* "

Specify a space-separated list of dracut modules to call when building the initramfs. Modules are located in */usr/lib/dracut/modules.d*. This option forces dracut to only include the specified dracut modules. In most cases the "add_dracutmodules" option is what you want to use. This option is not recommended to use (use at your own risk).

add_drivers+=" *<kernel modules>* "

Specify a space-separated list of kernel modules to add to the initramfs. The kernel modules have to be specified without the ".ko" suffix.

force_drivers+=" *<list of kernel modules>* "

See add_drivers above. But in this case it is ensured that the drivers are tried to be loaded early via modprobe.

omit_drivers+=" *<kernel modules>* "

Specify a space-separated list of kernel modules not to add to the initramfs. The kernel modules have to be specified without the ".ko" suffix.

drivers+=" <kernel modules> "

Specify a space-separated list of kernel modules to exclusively include in the initramfs. The kernel modules have to be specified without the ".ko" suffix. This option forces dracut to only include the specified kernel modules. In most cases the "--add-drivers" option is what you want to use. This option is not recommended to use (use at your own risk).

add_dlopen_features+=" <pattern>:<feature>[,<feature>...] ... "

Specify a space-separated list of binaries matching *pattern* against a comma-separated list of features to install dependencies for. For example, "libsystemd-shared-*.so:ids,ip4tc" will install the dependencies for systemd's international domain name and iptables support. *pattern* should match the soname for libraries or the filename for executables.

omit_dlopen_features+=" <pattern>:<feature>[,<feature>...] ... "

Specify a space-separated list of binaries matching *pattern* against a comma-separated list of features to omit dependencies for. Some dracut modules add certain features by default. This takes precedence over `add_dlopen_features` above.

filesystems+=" <filesystem names> "

Specify a space-separated list of kernel filesystem modules to exclusively include in the generic initramfs.

drivers_dir="<kernel modules directory>"

Specify the directory where to look for kernel modules.

fw_dir+=" ;<dir>[:<dir> ...] "

Specify additional colon-separated list of directories where to look for firmware files.

libdirs+=" <dir>[<dir> ...] "

Specify a space-separated list of directories where to look for libraries.

install_items+=" <file>[<file> ...] "

Specify additional files to include in the initramfs, separated by spaces.

remove_items+=" <file/dir>[<file/dir> ...] "

Specify additional files or directories to remove from the generated initramfs, separated by spaces. These *file/dir* are shell wildcard patterns (see [glob\(7\)](#)). Warning: Avoid manually removing files or directories, as you may inadvertently remove essential ones that dracut won't detect or warn you about. Using this option is not recommended and is at your own risk.

install_optional_items+=" <file>[<file> ...] "

Specify additional files to include in the initramfs, separated by spaces, if they exist.

compress="{cat|bzip2|lzma|xz|gzip|lzop|lz4|zstd|<compressor [args ...]>}"

Compress the generated initramfs using the passed compression program.

If you pass it just the name of a compression program, it will call that program with known-working arguments.

If you pass arguments, it will be called with exactly those arguments.

Depending on what you pass, this may result in an initramfs that the kernel cannot decompress.

To disable compression, use "cat".

compress_level_bzip2="{1-9}"

Compression level when using bzip2 compression (default=9).

compress_level_gzip="{1-9}"

Compression level when using gzip compression (default=9).

compress_level_lz4="{1-12}"

Compression level when using lz4 compression (default=9).

compress_level_lzma="{0-9}"

Compression level when using lzma compression (default=9).

compress_level_lzop="{1-9}"

Compression level when using lzop compression (default=9).

compress_level_xz="{0-9}"

Compression level when using xz compression (default=unset, i.e. use xz default).

compress_level_zstd="{1-19}"

Compression level when using zstd compression (default=15).

squash_compress="{<compressor [args ...]>}"

Compress the squashfs image using the passed compressor and compressor specific options for mksquashfs. You can refer to mksquashfs manual for supported compressors and compressor specific options.

If squash module is not called when building the initramfs, this option will not take effect.

do_strip="{yes|no}"

Strip binaries in the initramfs (default=yes).

aggressive_strip="{yes|no}"

Strip more than just debug symbol and sections, for a smaller initramfs build. The "do_strip=yes" option must also be specified (default=no).

do_hardlink="{yes|no}"

Hardlink files in the initramfs (default=yes).

prefix=" <directory> "

Prefix initramfs files with <directory>.

hostonly="{yes|no}"

Host-only mode: Install only what is needed for booting the local host instead of a generic host and generate host-specific configuration (default=yes).

hostonly_mode="{sloppy|strict}"

Specify the host-only mode to use (default=sloppy).

In "sloppy" host-only mode, extra drivers and modules will be installed, so minor hardware change won't make the image unbootable (e.g. changed keyboard), and the image is still portable among similar hosts.

With "strict" mode enabled, anything not necessary for booting the local host in its current state will not be included, and modules may make additional efforts to save more space. Minor changes in hardware or environment can make the image unbootable.

hostonly_cmdline="{yes|no}"

If set to "yes", store the kernel command line arguments needed in the initramfs. If **hostonly**="yes" and this option is not configured, it's automatically set to "yes". (default=no)

hostonly_nics+=" [*<nic>* [*<nic>* ...]] "

Only enable listed NICs in the initramfs. The list can be empty, so other modules can install only the necessary network drivers.

persistent_policy="*<policy>*"

Use *<policy>* to address disks and partitions. *<policy>* can be any directory name found in /dev/disk (e.g. "by-uuid", "by-label"), or "mapper" to use /dev/mapper device names (default=mapper).

tmpdir="*<temporary directory>*"

Specify temporary directory to use.

Warning

If chrooted to another root other than the real root device, use **--fstab** and provide a valid */etc/fstab*.

use_fstab="{*yes|no*}"

Use */etc/fstab* instead of */proc/self/mountinfo* (default=no).

add_fstab+=" *<filename>* "

Add entries of *<filename>* to the initramfs */etc/fstab*.

add_device+=" *<device>* "

Bring up *<device>* in initramfs, *<device>* should be the device name. This can be useful in host-only mode for resume support when your swap is on LVM an encrypted partition.

mdadmconf="{*yes|no*}"

Include local */etc/mdadm.conf* (default=no).

lvmconf="{*yes|no*}"

Include local */etc/lvm/lvm.conf* (default=no).

fscks=" *<fsck tools>* "

Add a space-separated list of fsck tools.

If nothing is specified, the default is `umount mount /sbin/fsck* xfs_db xfs_check xfs_repair e2fsck jfs_fsck btrfsck`.

The installation is opportunistic (non-existing tools are ignored).

nofscks="{*yes|no*}"

If specified, inhibit installation of any fsck tools (default=no).

ro_mnt="{*yes|no*}"

Mount / and */usr* read-only by default (default=no).

kernel_cmdline="*parameters*"

Specify default kernel command line parameters. Despite its name, this command only sets initrd parameters.

kernel_only="{*yes|no*}"

Only install kernel drivers and firmware files (default=no).

no_kernel="{*yes|no*}"

Do not install kernel drivers and firmware files (default=no).

acpi_override="{*yes|no*}"

Caution

Only use this if you know what you are doing!

Override BIOS provided ACPI tables. For further documentation read

Documentation/acpi/initrd_table_override.txt

<https://www.kernel.org/doc/Documentation/acpi/initrd_table_override.txt> in the kernel sources. Search for ACPI table files (must have .aml suffix) in `acpi_table_dir=` directory (see below) and add them to a separate uncompressed cpio archive.

This cpio archive gets glued (concatenated, uncompressed one must be the first one) to the compressed cpio archive. The first, uncompressed cpio archive is for data which the kernel must be able to access very early (and cannot make use of uncompress algorithms yet) like microcode or ACPI tables

(default=no).

acpi_table_dir="*<dir>*"

Directory to search for ACPI tables if `acpi_override=` is set to yes.

early_microcode="{yes|no}"

Combine early microcode with ramdisk (default=yes).

stdloglvl="{0-6}"

Specify logging level for standard error (default=3).

Table 1. Logging Levels

0	suppress any messages
1	only fatal errors
2	all errors
3	warnings
4	info
5	debug info (here starts lots of output)
6	trace info (and even more)

sysloglvl="{0-6}"

Specify logging level for syslog (default=0).

fileloglvl="{0-6}"

Specify logging level for logfile (default=4).

logfile="*<file>*"

Path to logfile.

sshkey="*<file>*"

SSH key file used with ssh-client module.

show_modules="{yes|no}"

Print the name of the included modules to standard output during build (default=no).

i18n_vars="<variable mapping>"

Distribution specific variable mapping. See dracut/modules.d/10i18n/README for a detailed description.

i18n_default_font="<fontname>"

The font <fontname> to install, if not specified otherwise. Default is "eurlatgr".

i18n_install_all="{yes|no}"

Install everything regardless of generic or host-only mode (default=no).

reproducible="{yes|no}"

Create reproducible images (default=no).

noimageifnotneeded="{yes|no}"

Do not create an image in host-only mode, if no kernel driver is needed and no /etc/cmdline/*.conf will be generated into the initramfs (default=no).

loginstall="<directory>"

Log all files installed from the host to <directory>.

uefi="{yes|no}"

Instead of creating an initramfs image, dracut will create a UEFI executable, which can be executed by a UEFI BIOS (default=no).

The default output filename is

<EFI>/EFI/Linux/linux-\$kernel\$-<MACHINE_ID>-<BUILD_ID>.efi. <EFI> might be /efi, /boot or /boot/efi depending on where the ESP partition is mounted. The <BUILD_ID> is taken from BUILD_ID in /usr/lib/os-release or if it exists /etc/os-release and is left out, if BUILD_ID is non-existent or empty.

machine_id="{yes|no}"

Affects the default output filename of the UEFI executable, including the <MACHINE_ID> part (default=yes).

uefi_stub="<file>"

Specifies the UEFI stub loader, which will load the attached kernel, initramfs and kernel command line and boots the kernel. The default is /lib/systemd/boot/efi/linux<EFI-MACHINE-TYPE-NAME>.efi.stub.

uefi_splash_image="<file>"

Specifies the UEFI stub loader's splash image. Requires bitmap (.bmp) image format.

uefi_secureboot_cert="<file>", uefi_secureboot_key="<file>"

Specifies a certificate and corresponding key, which are used to sign the created UEFI executable. Requires both certificate and key need to be specified and sbsign to be installed.

uefi_secureboot_engine="parameter"

Specifies an engine to use when signing the created UEFI executable. E.g. "pkcs11"

kernel_image="<file>"

Specifies the kernel image, which to include in the UEFI executable. The default is

/lib/modules/<KERNEL-VERSION>/vmlinuz or /boot/vmlinuz-<KERNEL-VERSION>.

sbat="parameters"

Specifies the SBAT parameters, which to include in the UEFI executable. By default the default SBAT string added is `sbat,1,SBAT Version,sbat,1,https://github.com/rhboot/shim/blob/main/SBAT.md`.

enhanced_cpio="{yes|no}"

Attempt to use the dracut-cpio binary, which optimizes archive creation for copy-on-write filesystems (default=no).

When specified, initramfs archives are also padded to ensure optimal data alignment for extent sharing. To retain reflink data deduplication benefits, this should be used alongside the **compress**="cat" and **do_strip**="no" parameters, with initramfs source files, **tmpdir** staging area and destination all on the same copy-on-write capable file-system.

parallel="{yes|no}"

If set to yes, try to execute tasks in parallel (currently only supported for `--regenerate-all`).

initrdname="<filepattern>"

Specifies the file name for the generated initramfs if it is not set otherwise.

The initrdname configuration option is required to match the `initr*${kernel}*` file pattern and only one file with this pattern should exist in the directory where initramfs is loaded from.

Defaults to `initramfs-${kernel}.img`.

dracut_rescue_image="{yes|no}"

Let kernel-install create a rescue image (default=no). This configuration option applies only to kernel-install.

FILES

/etc/dracut.conf

Old configuration file. It is recommended to use individual files in */etc/dracut.conf.d/*.

/etc/dracut.conf.d/

Any */etc/dracut.conf.d/*.conf* file can override the values in */etc/dracut.conf*. The configuration files are read in alphanumerical order. The recommended ordering for distribution or user provided configuration is in the range of 50-59.

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SEE ALSO

man:dracut[8] man:dracut.cmdline[7]